

## Amendments to the Specification

Please amend the paragraph starting at line 4 on page 5 as indicated below.

Various other known filter structures may be employed to perform combined Nyquist filtering and pre-equalization. For example, Fig. 6 is an alternative filter implementation for sub-block-~~406~~ 408 of Fig. 4, where in Fig. 6  $N' = N - L - 1$ . Filters similar in structure to that of Fig. 6 may also be used for other sub-blocks (not shown) in Figs. 4 and 5. The filter structure of Fig. 6 has several advantages over that of Fig. 4. Multipliers **602** in Fig. 6 operate at the input data rate, whereas multipliers **406** in Fig. 4 operate at four times the input data rate. Similarly, adders **604** operate at the input data rate. Multiplexer **606**, however, operates at four times the input data rate, and multiplexes the output of sub-blocks **608** to provide an output signal at four times the input data rate. Because of round-off errors, the filter of Fig. 6 will often not be numerically identical to that of Fig. 4. Another important advantage of the filter in Fig. 6 is the savings in delay elements **610**. The filter in Fig. 6 has approximately one-fourth as many delay elements as sub-block-~~406~~ 408 in Fig. 4. Many other well-known filter structures may be utilized to perform the filtering indicated in Fig. 4, although the final filtered output may not be identical to that of Fig. 4 due to round off error.